

### ABSTRACT

The voice controlled system of the present invention permits hands-free interactive control of a medical data processing instrument that interfaces with an implanted medical device. In an example embodiment, the system includes a microphone and a speech recognition circuit coupled to the microphone and adapted to recognize an audio signal from the microphone. The audio signal corresponds to one of a subset of commands from a set of commands and each command corresponds to a task to be performed on the implanted medical device. The speech recognition circuit is further adapted to convert the audio signal into a selection code and match the selection code to one of the subset of commands. The system further includes a display device and a processor arrangement coupled to the speech recognition circuit and to the display device. The processor arrangement is configured to receive data indicative of an implanted medical device state and select the subset of commands as a function of the device state. The processor arrangement is also configured to display the device state data and the subset of commands and generate a control signal in response to the selection code match. The system also includes a medical data processing instrument coupled to the processor arrangement that is adapted to, in response to the control signal, execute the one of the subset of commands and to display data generated in response to execution of the one of the subset of commands.

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